

Appl. No. 10/076,340
Response to 1st Office Action dated 06/15/2006
Reply to Office Action of 03/15/2006

IN THE SPECIFICATION:

Please replace the two paragraphs on page 1, line 22 to page 2, line 26 with the following paragraphs.

As is well known, SCSI is a commonly used industry standard protocol for storage devices. Using the SCSI protocol, drive control commands and data are sent to the drives. Responses and status messages, as well as data read from the devices, are passed through SCSI controllers. In a system supporting iSCSI, a user or software application issues a command to store or retrieve data on a SCSI storage device. The request is processed by the operating system and is converted to one or more SCSI commands that are then passed to an application program or to a card. The command and data are encapsulated by representing them as a serial string of bytes proceeded by iSCSI headers. The encapsulated data is then passed to a TCP/IP layer that breaks it into packets suitable for transfer over the network. If required, the encapsulated data can also be encrypted for transfer over an insecure network. The packets are sent over the network or the Internet.

At the receiving storage controller, the packets are recombined and, if necessary, decrypted into the original encapsulated SCSI commands and data. The storage controller then uses the iSCSI headers to send the SCSI control commands and data to the appropriate drive, which performs the functions that were requested by the original computer or application. If a request for data has been sent, the data is retrieved from the drive, encapsulated and returned to the requesting computer. The entire process is transparent to the user.

In any event, due to the volume of data that may be being transacted, a higher data transfer rate may be convenient. Thus, what is needed is a method and apparatus to ~~boost~~ boost the data transfer rate.

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Please replace the two paragraphs starting on page 9, line 20 and ending on page 10, line 3 with the following paragraphs.

The present invention provides an apparatus and method of splitting data stream over multiple TCP/IP connections to ~~beester~~ boost data transfer rate. The invention may be local to client systems 108, 110 and 112 of Fig. 1 or to the server 104 or to both the server 104 and clients 108, 110 and 112. Consequently, the present invention may reside on any data storage medium (i.e., floppy disk, compact disk, hard disk, ROM, RAM, etc.) used by a computer system.

Fig. 4 depicts a system incorporating an iSCSI protocol. Operating system 400 and host bus adapter ~~404~~ 410 make up the system. Operating system 400 is made up of server 402, kernel 404 and SCSI protocol 606. Host bus adapter 410 contains hardware API (application program interface) 412, iSCSI agent 414, TCP stack 416, IP stack 418 and network interface 420. The network interface 420 interacts with network 430.

AUS920010897US1

Page 3 of 13